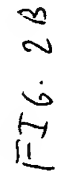
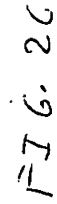


FIG. 1 (prior art)

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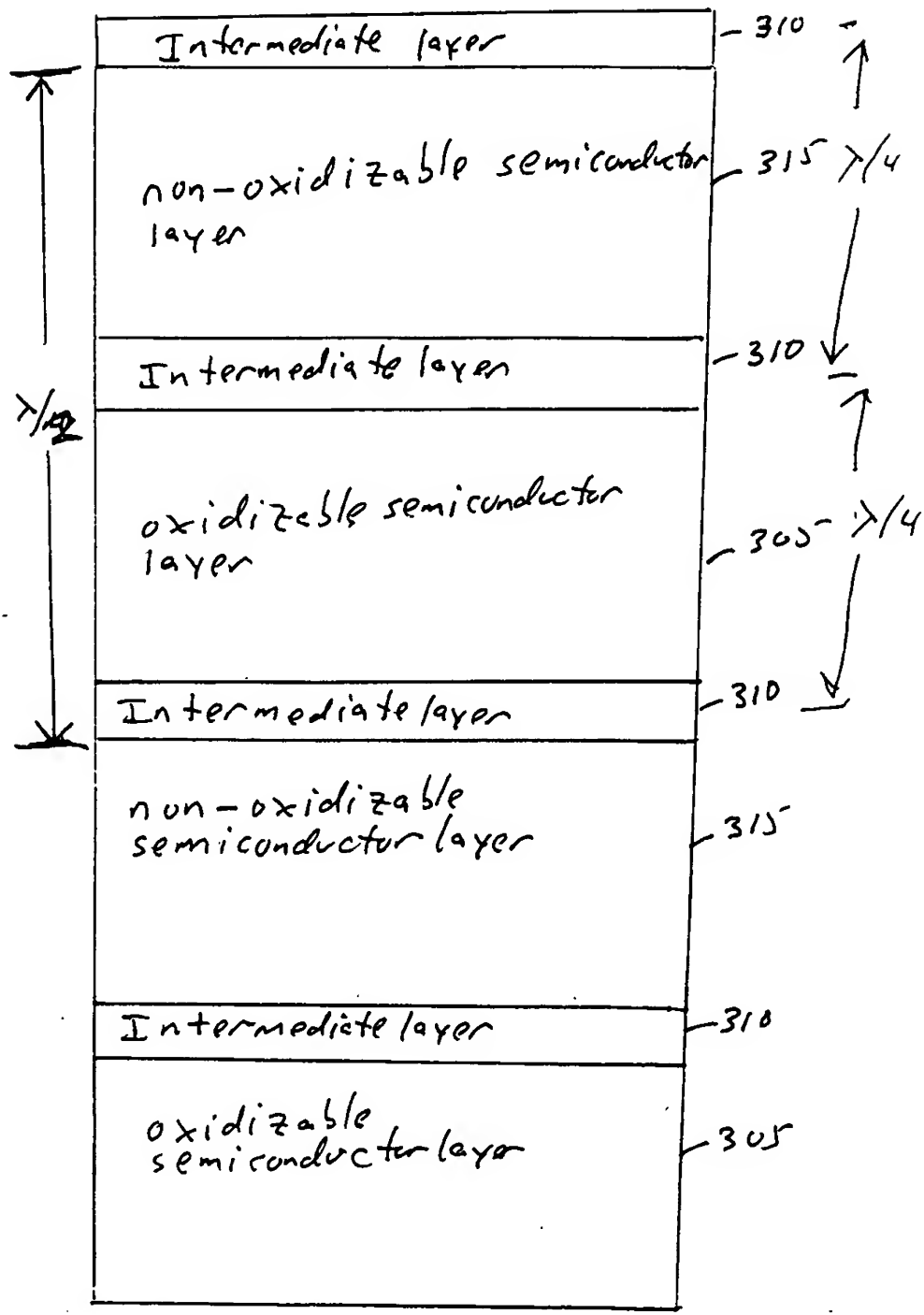


FIG. 3

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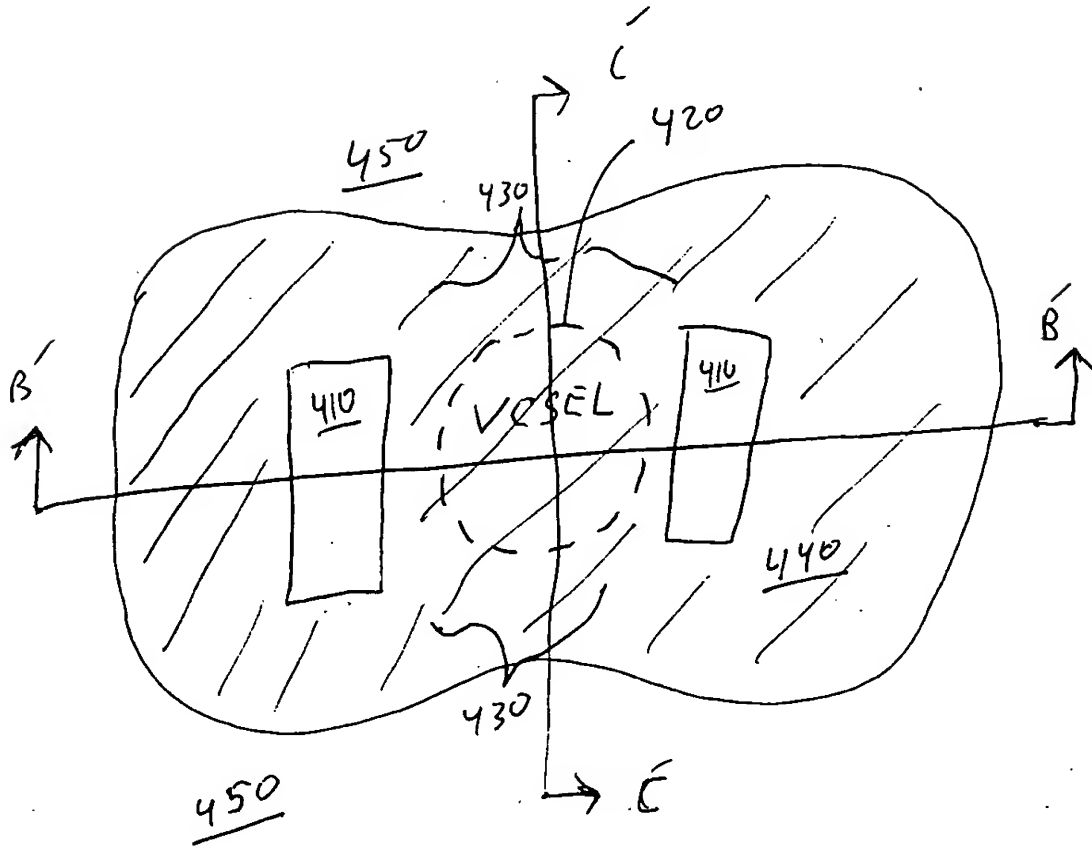


FIG. 4A

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F 16.48

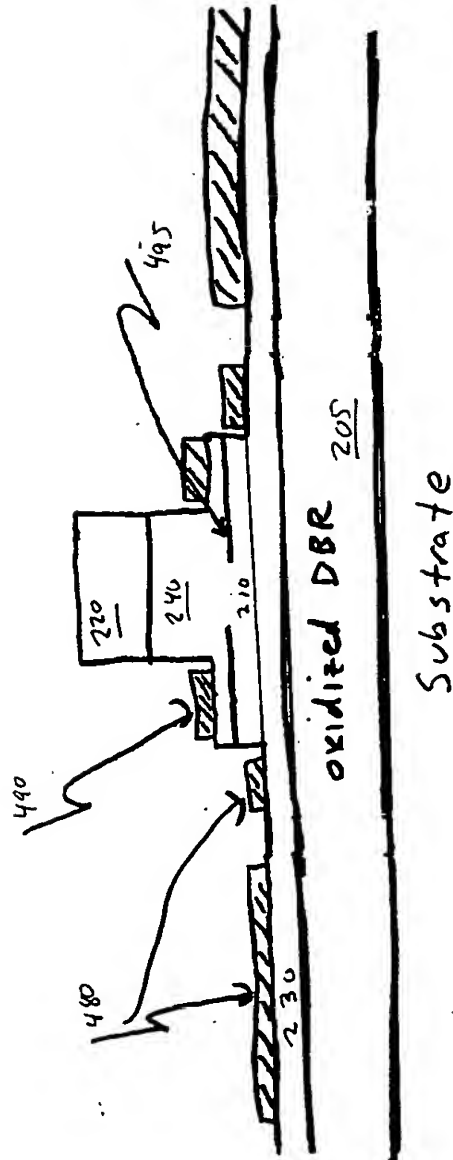


FIG. 4C

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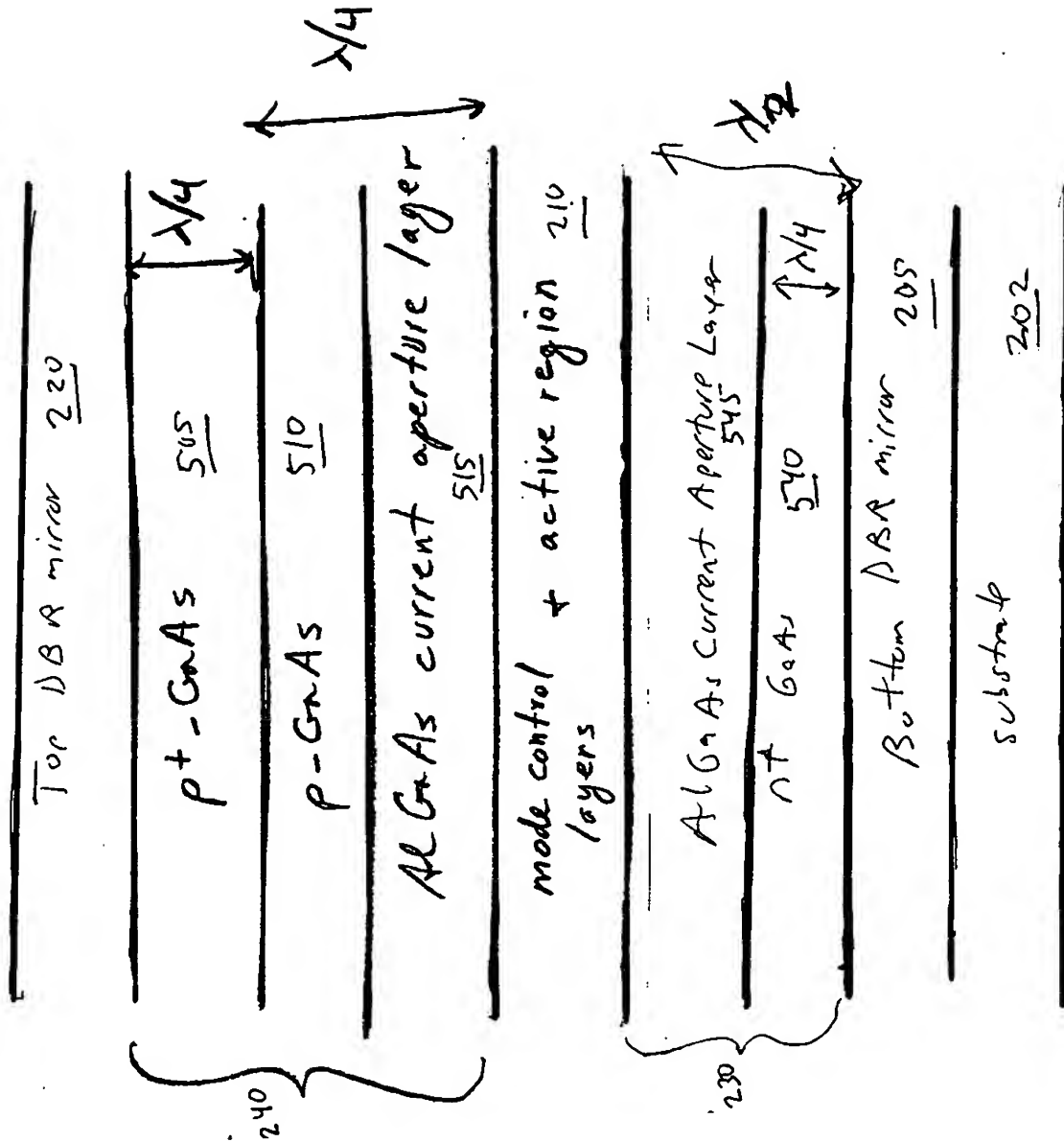
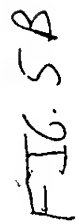


FIG. 5A



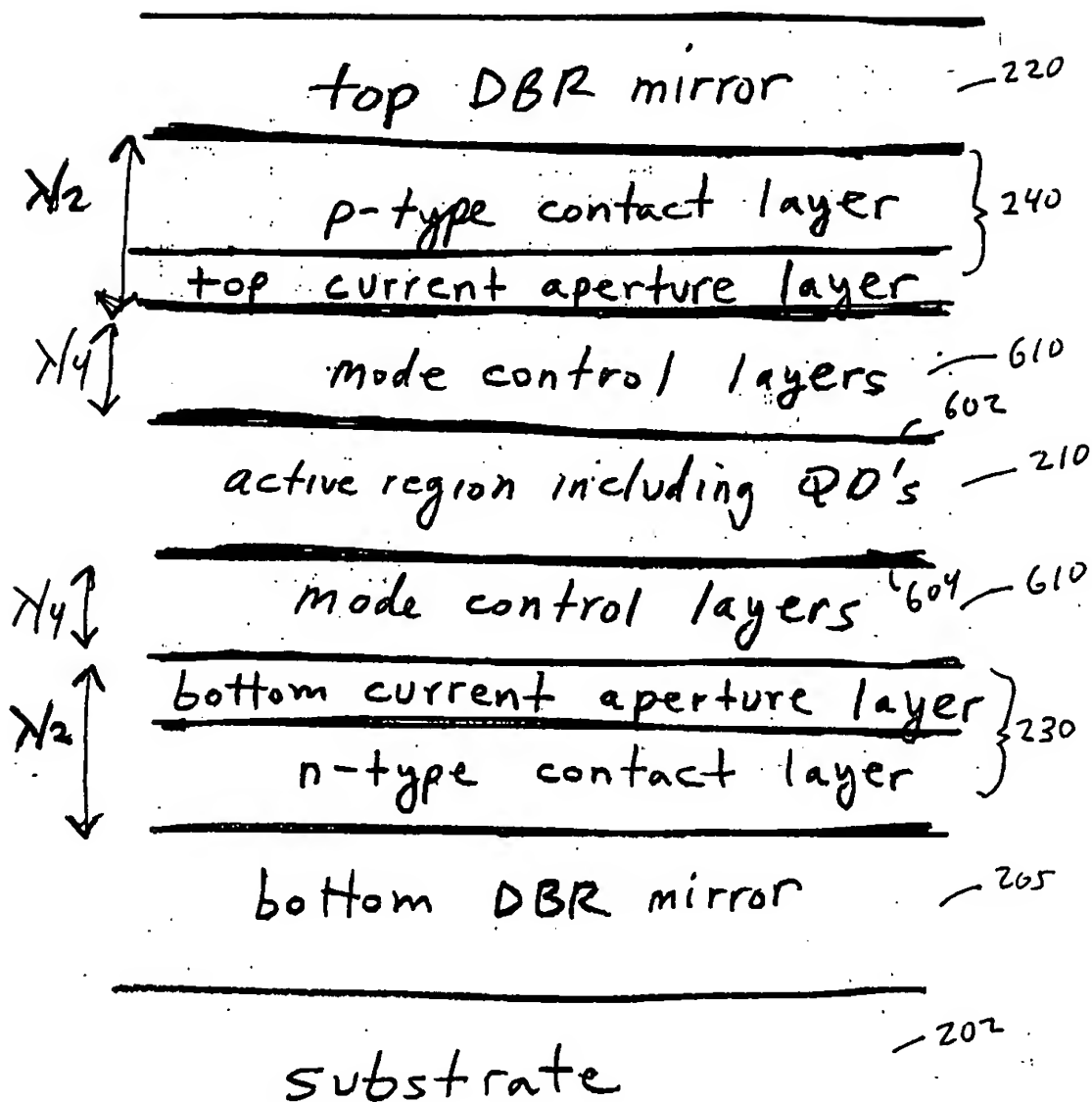


FIG. 6A

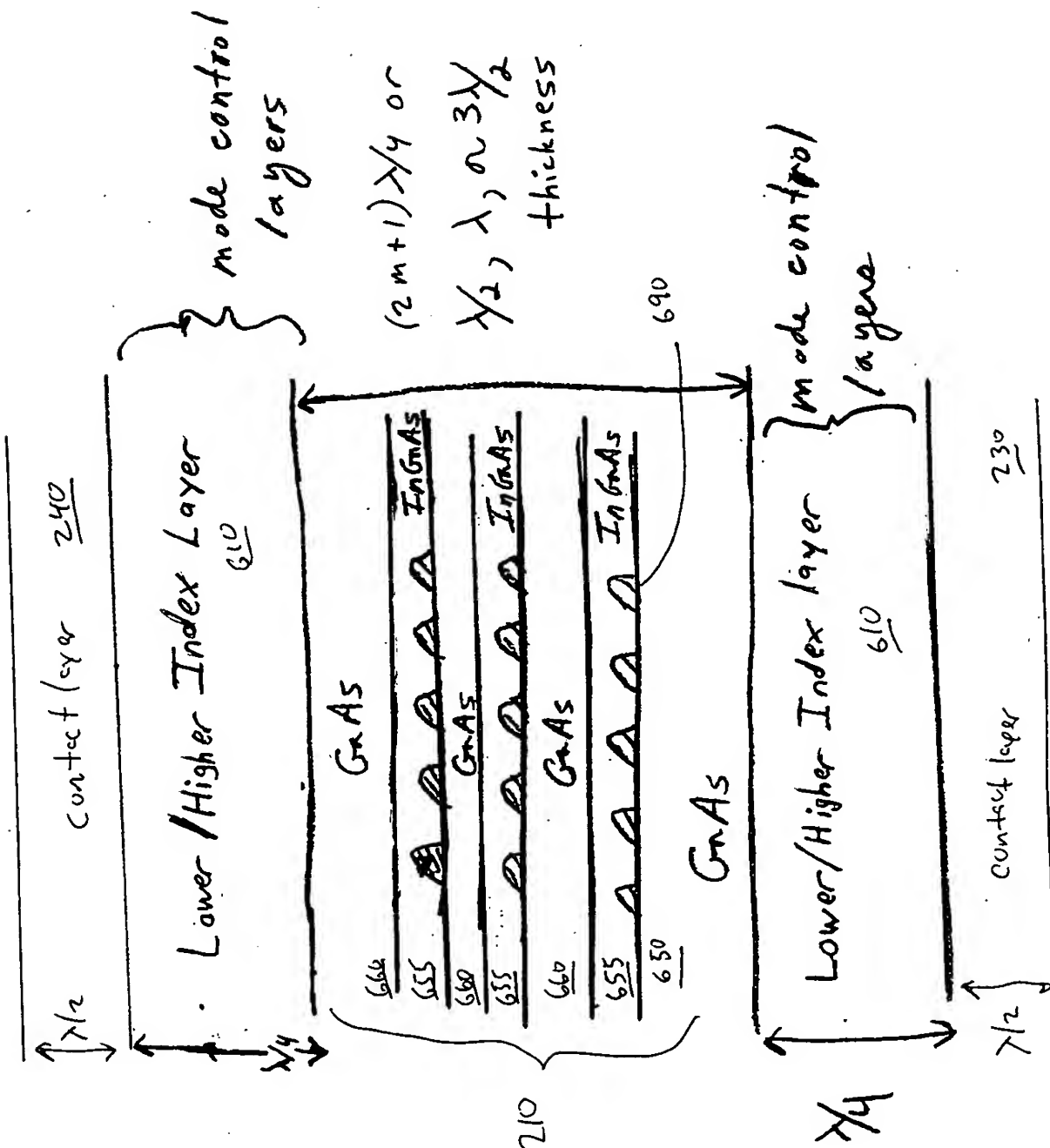


FIG. 6B

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700
↓

220	GaAs	92nm, 5x	
	Al _{0.92} Ga _{0.08} As	10nm, 5x	
	AlAs	213nm, 5x	
	Al _{0.92} Ga _{0.08} As	10nm, 5x	
	GaAs, p ³	92nm	p-contact
240	Al _{0.92} Ga _{0.08} As, p ¹	107nm	Mode Control
610	GaAs, p ¹	71nm	p-contact
	Al _{0.98} Ga _{0.02} As, p ¹	50nm	Current aperture
	Al _{0.92} Ga _{0.08} As	12nm	grade for current aperture
	GaAs	20nm	Active
	GaAs	10nm, 3x	600C Active
	GaAs	0.8nm, 3x	Active
	In _{0.15} Ga _{0.85} As	~8nm, 3x	Active
210	InAs	2.4ML, 3x	Active
	In _{0.15} Ga _{0.85} As	1nm, 3x	510C Active
	GaAs	159nm	Active
610	Al _{0.92} Ga _{0.08} As, n ¹	107nm	Mode Control
230	GaAs, n ²	92nm	n-contact
	Al _{0.92} Ga _{0.08} As	10nm, 8x	
205	AlAs	213nm, 8x	
	Al _{0.92} Ga _{0.08} As	10nm, 8x	
	GaAs	92nm, 8x	
	Al _{0.92} Ga _{0.08} As	10nm	
	AlAs	213nm	
	Al _{0.92} Ga _{0.08} As	10nm	
	GaAs	200nm	600C
	GaAs N+ 2" 1-side	Tox=620C, 10min	

FIG. 7

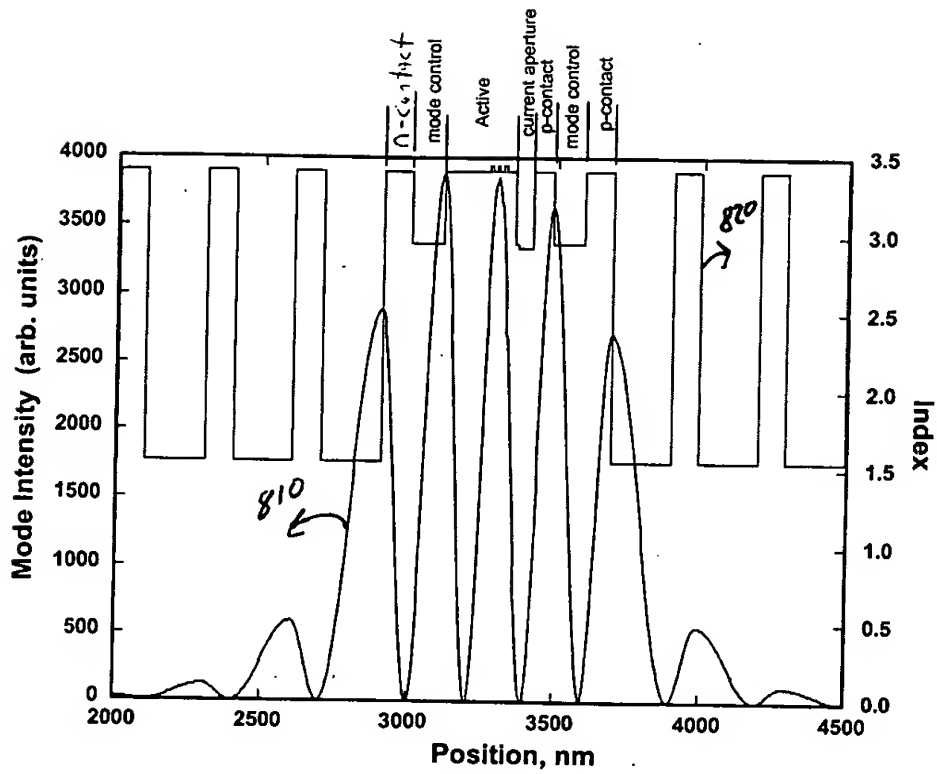


FIG. 8

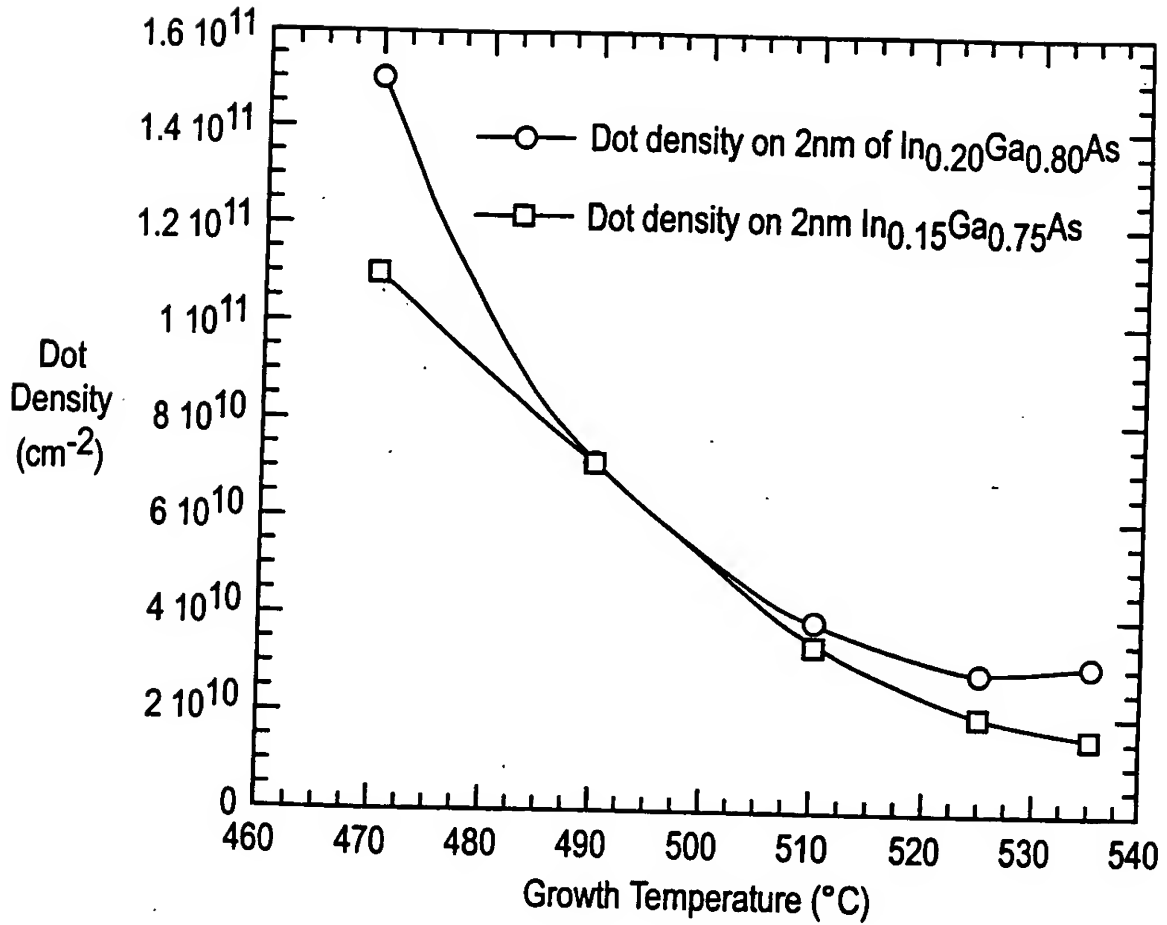


FIG. 9

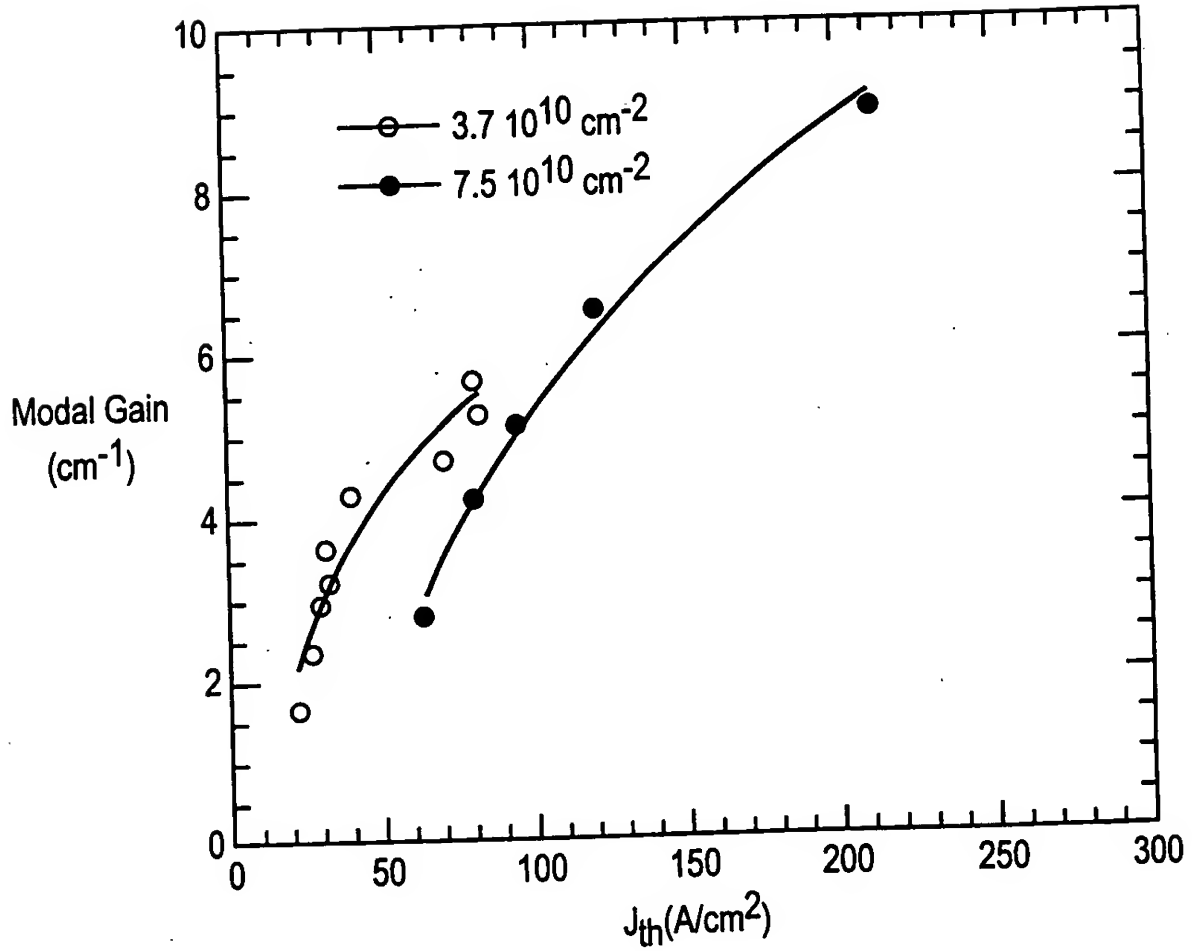


FIG. 10

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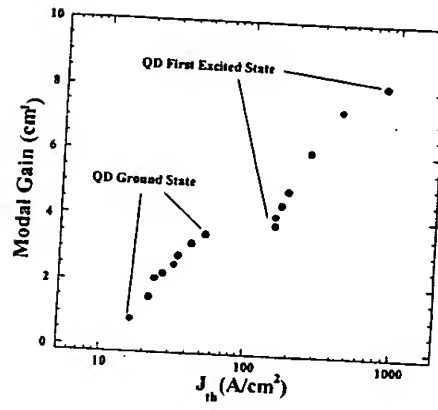


FIG. 11

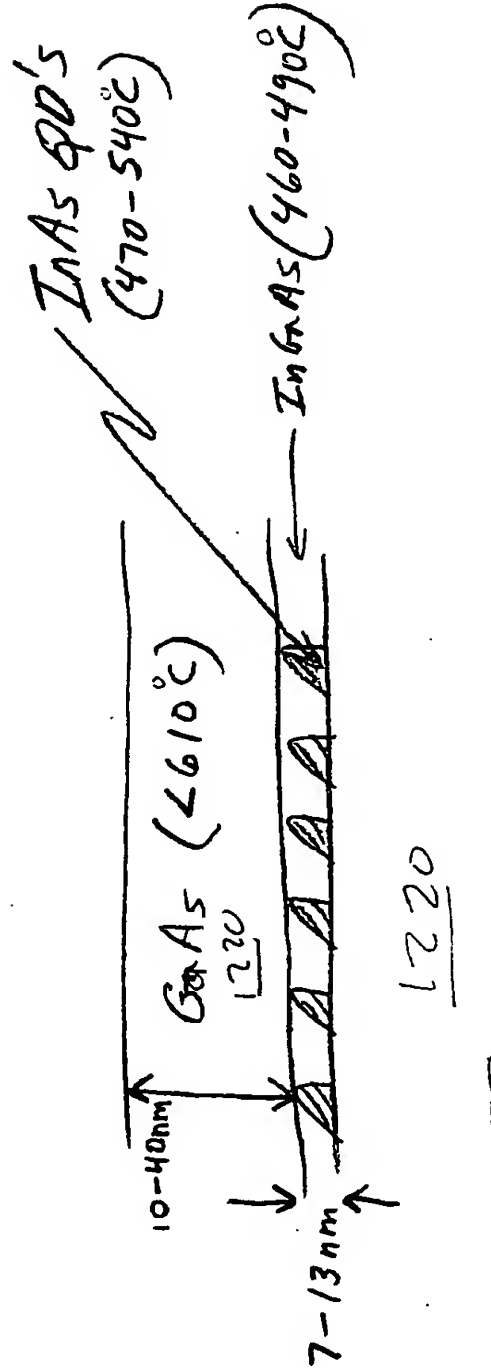


FIG. 12A

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1215 ~ InGaAs 6-11 nm (460-490°C)
 1210 ~ InAs 1-3 monolayers (470-540°C)
 1205 ~ InGaAs 0.5-2 nm (~490°C)
 1200 ~ GaAs -1220

FIG. 12B

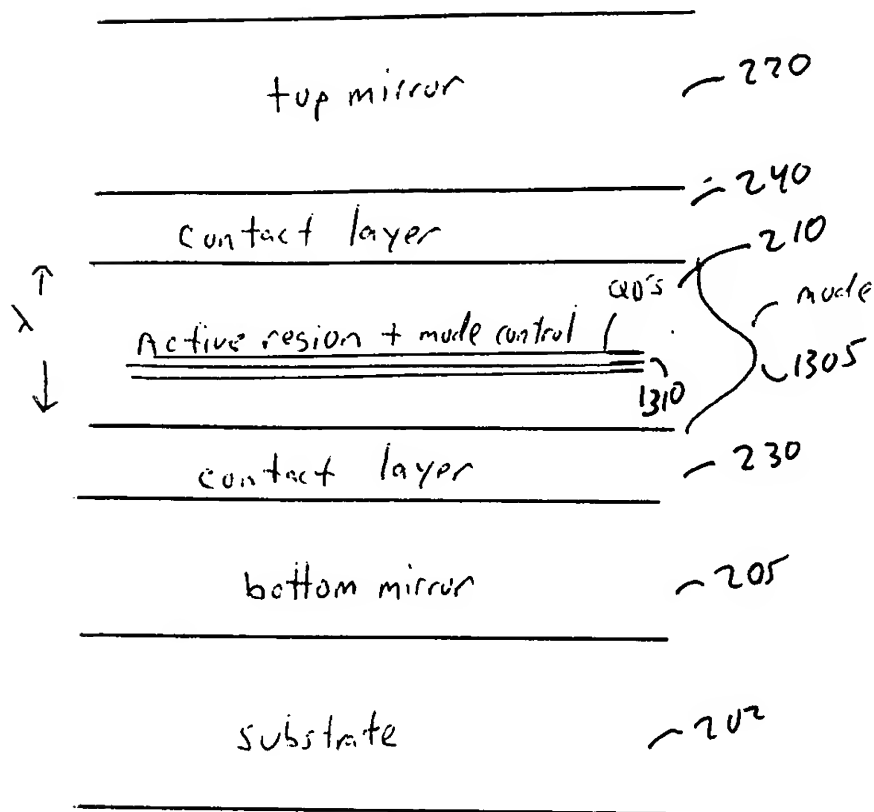


FIG. 13

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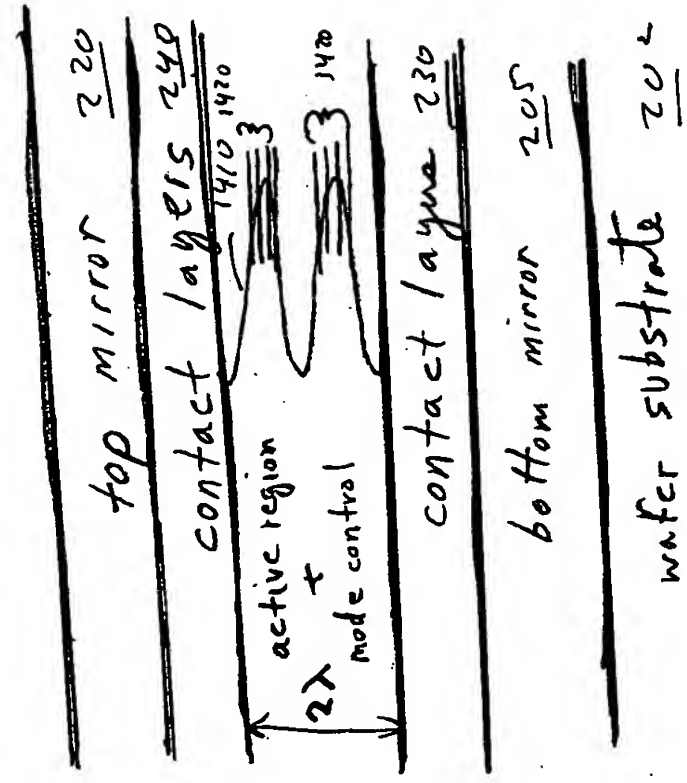


FIG. 14

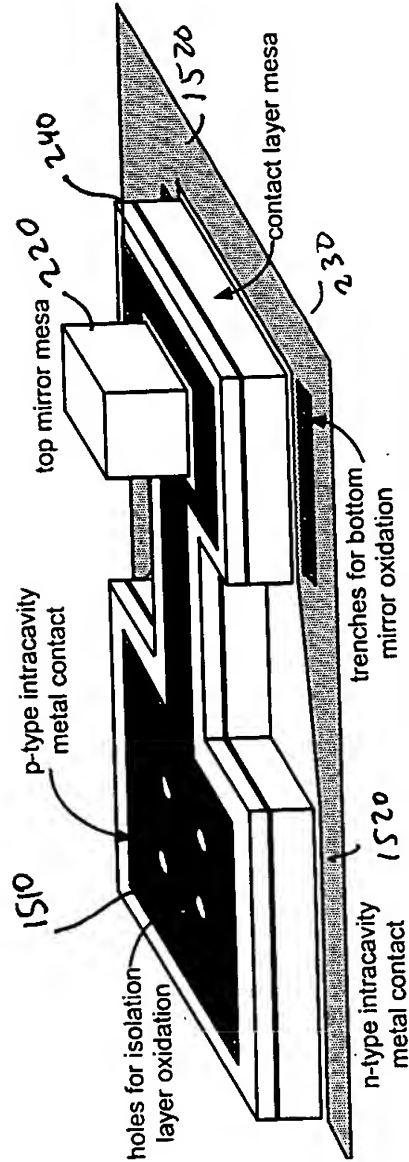


FIG. 15A

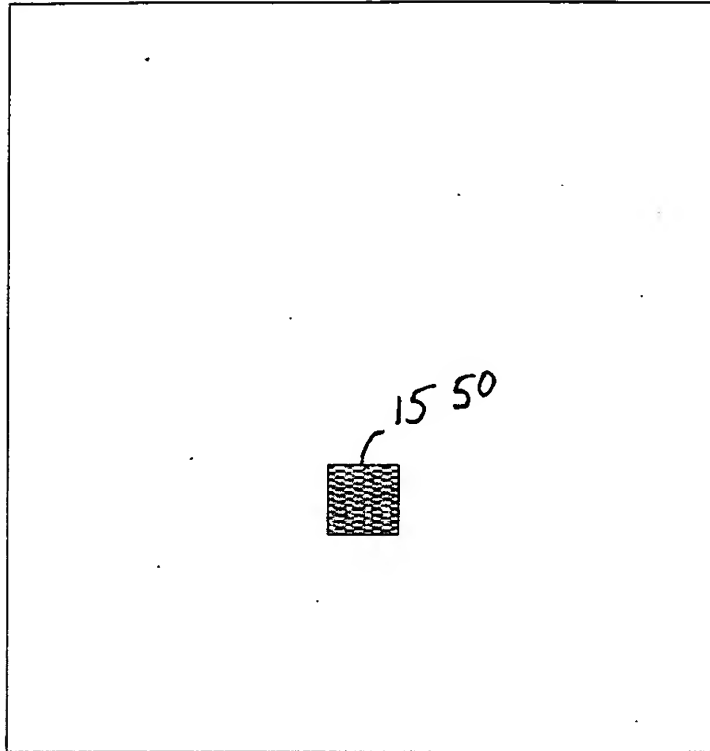


FIG. 15B

20100803-030102

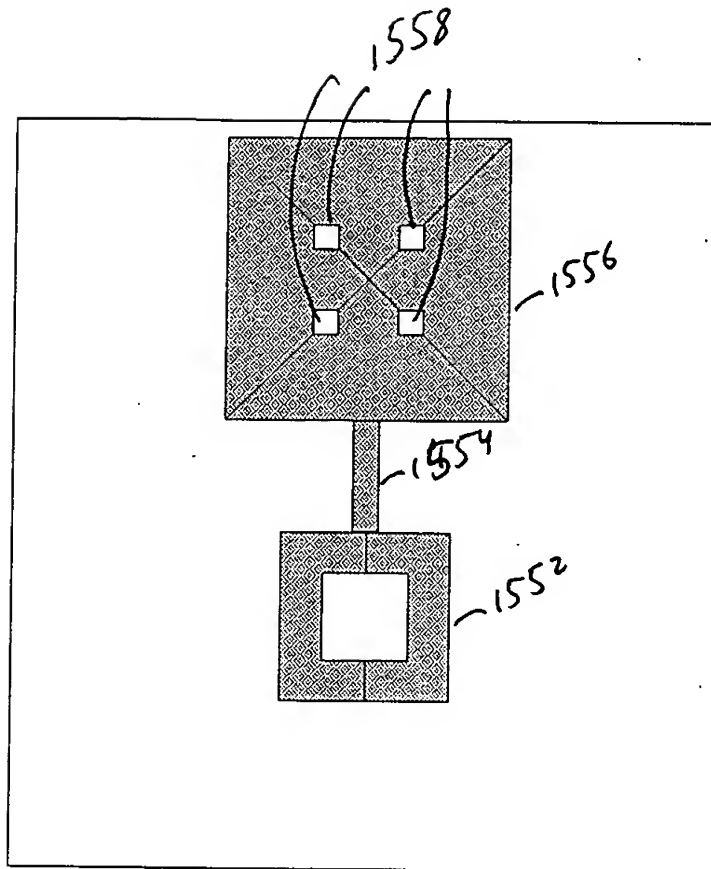


FIG. 15C

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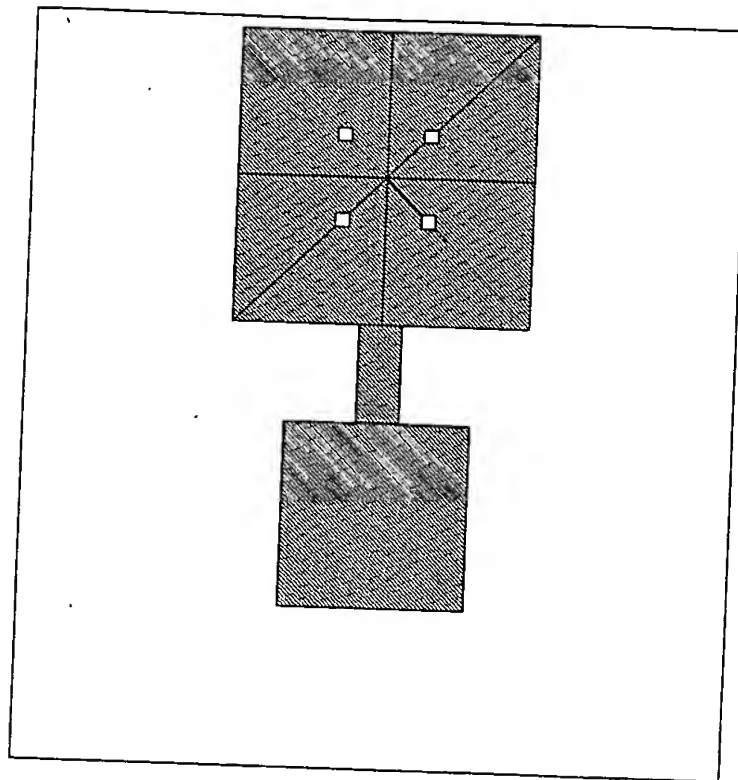


FIG. 15D

10087408-030102

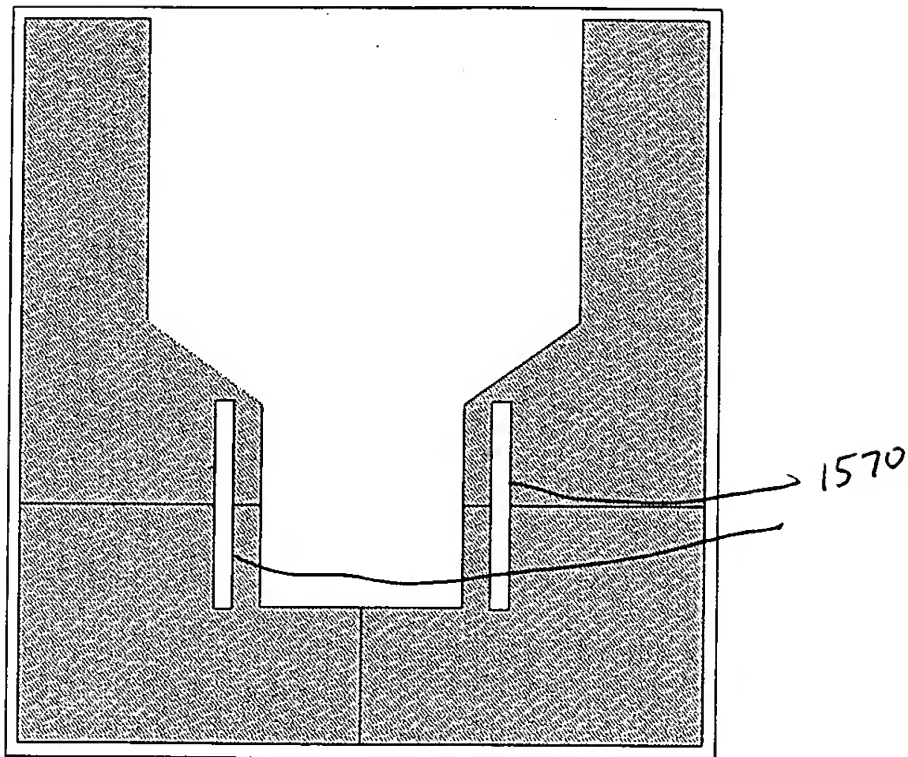


FIG. 15E

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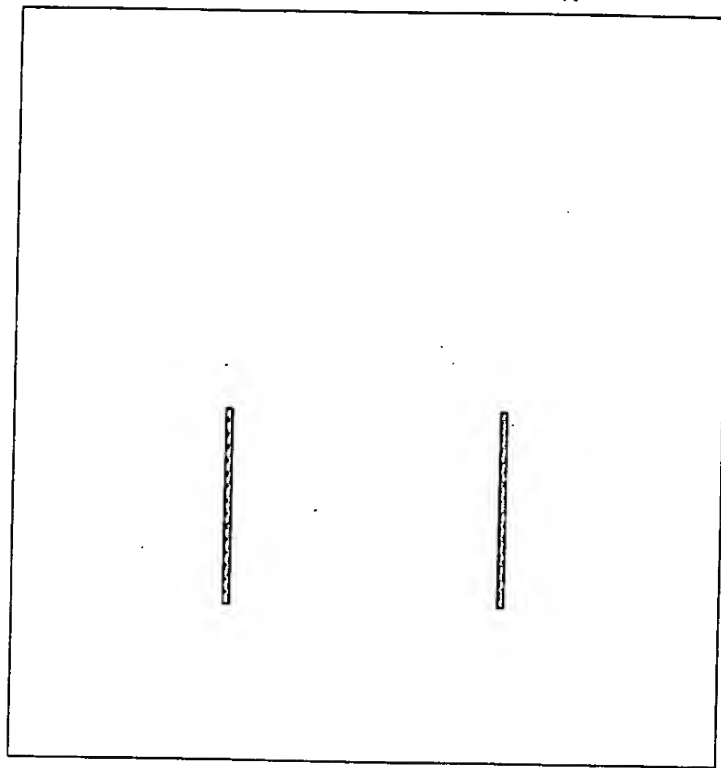


FIG. 15 F

10087408-030102

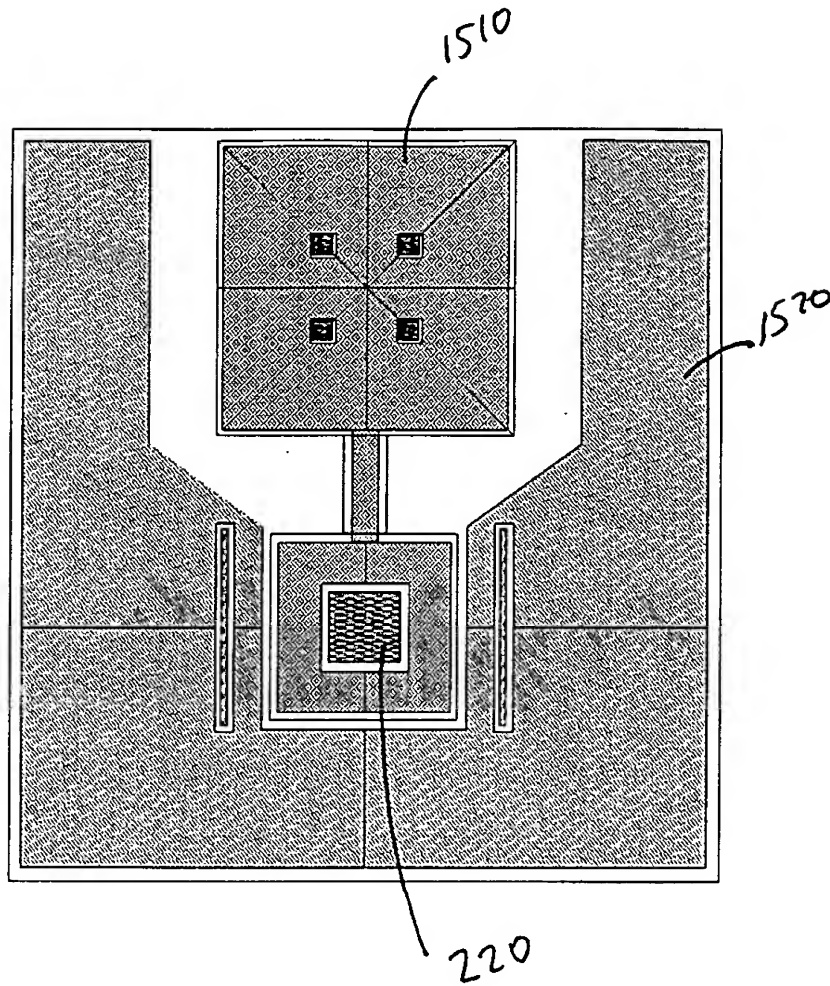


FIG. 15G

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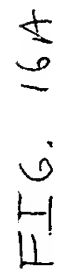


FIG. 16A

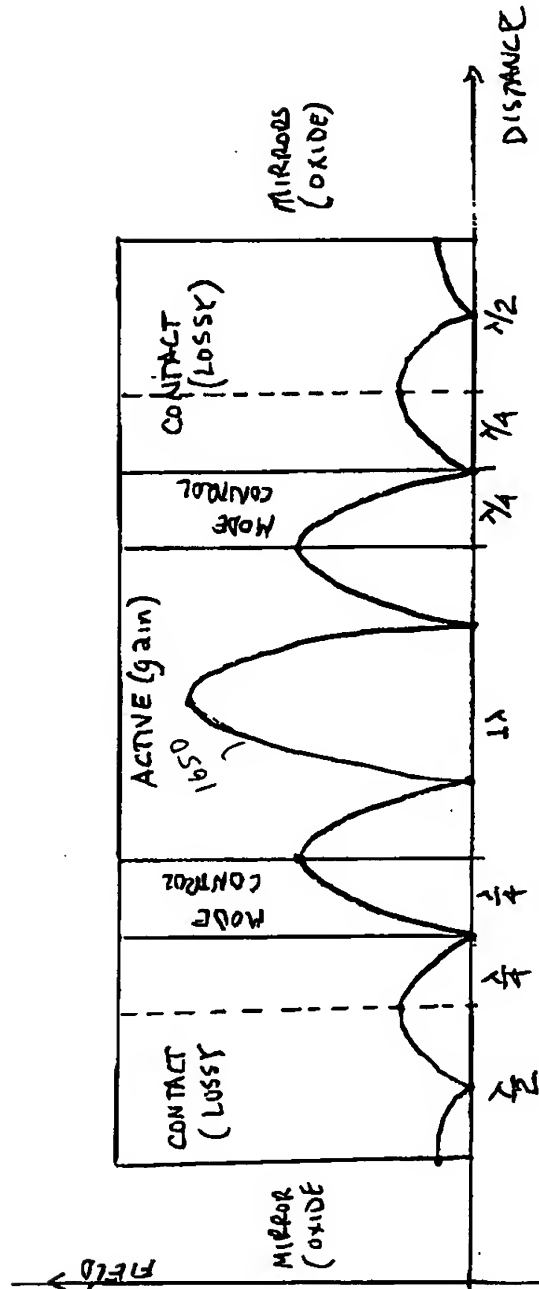


FIG. 16B